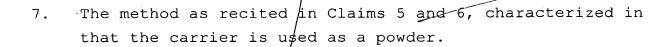
Claims what is claimed is:

- 1. A temperature sensor having at least one conductor track, a temperature-dependent change in a resistance of the conductor track being measured and evaluated, characterized in that the conductor track (14) is made of a metal, which covers a surface (24) of a carrier made of a metal oxide, metal carpide, or metal nitride.
- 2. The temperature sensor as recited in Claim 1, characterized in that the carrier is made of zirconium dioxide and/or aluminum oxide.
- 3. The temperature sensor as recited in one of the preceding claims, characterized in that the metal is cobalt, nickel, copper, or platinum.
- 4. The temperature sensor as recited in one of the preceding claims, characterized in that to determine the resistance, an a.c. voltage can be applied to the conductor track (14).
- 5. A method for manufacturing a temperature sensor having at least one conductor track, a temperature-dependent change in a resistance of the conductor track being measured and evaluated by the temperature sensor, characterized in that the conductor track (14) is formed by the currentless deposition of a metal onto a surface (24) of a carrier made of a metal oxide, metal nitride, or metal carbide and by a subsequent thermal treatment.
- 6. The method as recited in Claim 5, characterized in that a layer thickness (d) of a metal layer (26) disposed on the surface (24) of the carrier is determined by the duration and/or selected temperature during a thermal treatment.



8. The use of a temperature sensor as recited in one of Claims 1 through 7 in a layer (12) of a laminated layer sensor.

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